# Addressing Guidelines

for the

City of Cincinnati

and

**Hamilton County** 





# Introduction

The creation and maintenance of a comprehensive addressing system is one of the most important services a local government provides for its citizens. An accurate, consistent addressing system enables a community's law enforcement, fire and rescue, postal delivery, and other service agencies to operate efficiently and effectively. In addition, because they are easy for people to remember, addresses can provide a convenient reference tool for accessing various government records. For these reasons, the addressing of land parcels, structures, and individual occupancies must be done carefully and methodically.

This documentation describes the addressing guidelines for of City of Cincinnati and Hamilton County. It is intended to serve as a reference for all Geographic Information System (GIS) Technicians involved with address issuance and maintenance activities. The guidelines and procedures are divided into five main sections:

**I. Introduction:** This section describes the organizational layout of the documentation and the conventions used throughout

#### II. General Guidelines and Practices

- Addressing Authorities, Processes, Roles and Responsibilities, Fees, and Enforcement
- Addressing System Overview
- General Address Assignment Guidelines
- Addressing Examples for Common Street Layouts
- Addressing Examples for Common Parcel Layouts
- Addressing Examples for Common Structure and Occupancy Types
- Guidelines for Posting Street Signage
- Guidelines for Posting Addresses

#### III. Appendix

#### **DOCUMENTATION CONVENTIONS**

The following conventions are used throughout this documentation:

Abbreviation Notes: The following abbreviations are used throughout the text:

#### **CAGIS**

This abbreviation refers to the Cincinnati Area Geographic Information System Consortium which is comprised of all City of Cincinnati, Hamilton County, many County Communities and local Utilities, all of which share in- formation and GIS integrated technology. The abbreviation, CAGIS, is also used in reference to the staff that supports the systems and technology for the consortium.

#### GIS

This abbreviation refers to City of Cincinnati and Hamilton County's Geographic Information System. The GIS uses computer applications and databases to display Land record data in both graphic and attribute formats.

#### **CDOTE**

This abbreviation refers to the City of Cincinnati Department of Transportation and Engineering.

# General Guidelines and Practices

# 1. Addressing Authorities, Processes, Roles and Responsibilities, Fees, and Enforcement

Address Technicians (Personnel who assign/approve addresses)

- Interprets Address Guidelines
- Reviews street name requests (final approval is usually made by a separate committee or city council)
- Participates in resolution of street name or address conflicts
- Assigns house numbers
- Assigns address ranges to street segments
- Identifies potential conflicts and problems for the Address Rules Committee
- Conducts research on street name and address related issues for the Address Rules Committee

#### Address Rules Committee

- Rules on and amends addressing guidelines and policies
- Hears street name and house number assignment appeals
- Resolves inter-community addressing conflicts
- Issues recommendations on house renumbering
- Issues recommendations for public safety issues as they relate to addressing
- Makes recommendations on local government policy as it relates to addressing

#### **GIS Group**

- Issues recommendations on Electronic Addressing Standards as they relate to data sharing and record integration
- Provides coordination of an interagency/enterprise-wide database of STREET NAME, ADDRESSES AND ADDRESS RANGES
- Provides translation capability between record systems with different addressing

#### standards

 Assists in developing a comprehensive picture of current street names, aliases, house numbers, addressing grids, inconsistencies, unnamed roads, phonetic sets, etc.

## 2. Addressing System Overview

#### CITY OF CINCINNATI AND HAMILTON COUNTY ADDRESSING GRIDS

The City of Cincinnati and Hamilton County's method of address assignments can be described as the *Decimal, Hundred Block,* or *Philadelphia* system. In general, it is based on the concept of an *addressing grid* shared by the City of Cincinnati and Hamilton that is used throughout most of the county. However, there are seven distinct address grids in Hamilton County.

City of Cincinnati and Hamilton County Grid: Two imaginary base lines extend north-south and east-west. In general, the north-south meridian extends from the virtual intersection of Vine Street with the Ohio River and extends North. The east-west meridian is the Ohio River, with address ranges increasing north from the river. Along these base lines, additional N-S and E-W lines are added at one-mile intervals to define the grid. Figure 1 illustrates how these intersecting lines form the addressing grid.

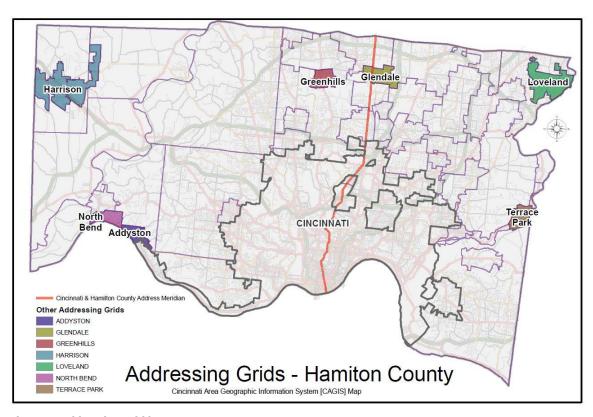


Figure 1: Addressing grid layout

#### ADDRESSING GRID LAYOUT

As one travels away from the origin point of the addressing grid in any direction, the address numbers along the streets will increase. Individual street addresses are assigned to parcels of land structures, and occupancies by first determining their orientation, direction, and distance relative to the base lines of the grid. Streets which run predominantly N-S will be addressed according to the N-S base line; E-W streets will follow the E-W base line. Figure 2 shows a sample layout of how streets are addressed based on their N-S or E-W orientation.

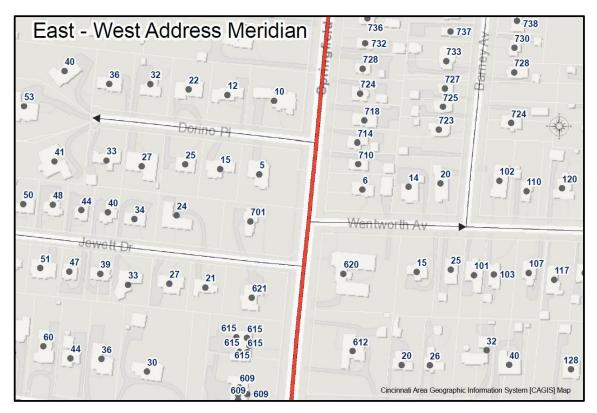


Figure 2: Street orientation within the addressing grid

#### STREET ORIENTATION WITHIN THE ADDRESSING GRID

In addition to determining the N-S and E-W orientation of a street, the addressing grid also determines the arrangement of the odd- and even-numbered addresses along each street.

Generally, within the City of Cincinnati and Hamilton County grid, odd-numbered addresses are located on the South side of E-W streets and on the West side of North- South streets. Even-numbered addresses are located on the North side and East side, respectively. However, some of the municipalities have adopted their own grid conventions within their jurisdiction.

As mentioned above, the City of Cincinnati and Hamilton County share the same addressing

grid. In addition, the cities of Harrison, Loveland, Addyston, North Bend, Terrace Park, Glendale, and Greenhills each maintain their own addressing grids within their jurisdiction.

#### **ADDRESS RANGES**

Another key component of the addressing system is the address range established for each street. The lowest value in the address range determines the smallest possible address number that can be assigned to the street. Likewise, the highest value in the range places a cap on the largest possible address number that can be used. The low and high address range values are themselves determined by a street's location, length, and alignment in relation to the existing addressing grid.

The "300 block" of a given street will include all odd-and-even numbered addresses ranging from 300 to 399. In practice, however, all 100 addresses will seldom be in use at one time. For this reason, the 300-399 range is labeled a potential or hypothetical address range. Those address numbers posted and used in the field are termed the actual address range of the street. For example, one block of Smith Street may have a potential address range of 500-599, but if the only addresses in use are 516, 545, and 571, the actual address range is 516-571. There should be no overlap in either potential or actual address ranges along consecutive blocks on a single street. Street segments in the CAGIS GIS are encoded with the potential address range. There should be no overlap in either potential or actual address ranges along consecutive blocks on a single street.

Some roadways, such as major highways and unnamed streets, do not follow the normal address range guidelines. Highways, such as I-75, are not given potential address ranges because they will probably never be used for addressing purposes. In contrast, the unnamed streets around the county may eventually be given official names as public or private roads. The GIS staff has therefore assigned each unnamed street a potential address range based on the local addressing grid. Until such a name is issued, however, the potential address range of an unnamed street cannot be used to issue an actual address.

When a street crosses from one addressing grid into another, a dramatic change in its address range may occur. Addresses which were increasing may suddenly start to decrease, block ranges may jump suddenly, or the odd/even relationship may switch sides. Cooperation between governing authorities can minimize confusion in these areas. For example, unincorporated county parcels are often addressed according to one of the municipal grids when they are located close to its jurisdiction. This arrangement helps to keep addresses consistent along the same street even if county and municipal parcels are intermingled.

There are a few dozen streets within Hamilton County that have a vanity address range. This is to say that these streets to do not follow the overall grid of the county of even the jurisdiction in which it resides. Most often, these vanity ranges are a 1-99 block, even though the street is not in proximity to a base line. These streets, or sometimes subdivisions, are usually in older developments and were established by the developers without authority from the local municipality. Vanity addresses should not be assigned for any future developments and existing vanity ranges should be updated to fit the overall addressing grid whenever possible.

#### **ADDRESS FORMAT**

Each street address is comprised of six components, some of which may be omitted if they do not apply in a particular situation. These components are:

#### Number Number Suffix Street Directional Street Name Street Type/Suffix Unit

- The number is a numerical identifier based on the addressing grid. The number can range from one to six digits depending on the parcel/structure/occupancy's location within the grid.
- The *number suffix* is a secondary designator assigned only when there are not enough available address numbers in an area. A number suffix directly follows the house number and may be either a letter or a fractional number. For example, if a new home were to be built between 340 and 342 White Street then 340 ½ or 340 B White Street may be assigned.
- The *street directional* is a prefix assigned to a street which crosses one of the base lines of the addressing grid and the same street name continues. The directional is required because streets which cross a base line normally have duplicate potential address ranges. To avoid this confusion, a directional value of "N," "S," "E," or "W" is used to indicate if that section of the street lies north, south, east, or west of the base line in question. Thus, 8th St east of the Vine St base line is labeled "E 8th St," while west of that line is called "W 8th St". If the street name changes at the point of crossing the base line, then a street directional is not needed.

  Note: There are a few examples of streets where an apparent directional is actually part of the street name. An example is "North Bend Rd." In this instance "N Bend Rd" would be incorrect.
- The *street name* identifies the stretch of roadway on which the parcel/structure/occupancy is addressed. Within unincorporated Hamilton County, all street names originate from subdivision plats or street name petitions submitted to the Board of County Commissioners for approval. However, before each proposed street name is sent before the Board, it is first reviewed and approved by the E-911 referencing staff to avoid the duplication of an existing street name. While some older street names are repeated in different jurisdictions, the current E-911 policy is to avoid duplication for new names anywhere within the boundaries of the county. Under this policy, "Oak Street" and "Oak Road" would still be considered unacceptable duplicates.
  - In the City of Cincinnati, the names of public streets are dedicated by city ordinance, passed by city council. Proposals for new names and street name changes for all public streets must first be approved by the Committee of Names.
- The street type/suffix is an identifier to make the street name unique (if duplicate street names already exist) and can help describe the road's length or layout. A "Circle" (Cr), for example, will normally connect back to its street of origin. A "Court" (Ct) is a short street that begins at or ends in a cul-de-sac. Aside from such descriptive terms,

there are no general conventions in City of Cincinnati and Hamilton County for assigning street types. For example, Roads do not run in a north/south direction, nor do Streets run in an east/west direction.

Note: In a few instances there are streets in Hamilton County without a suffix. One example of this is "Broadway" in Cincinnati.

• The *unit* is another type of secondary designator. The unit field comes at the end of the street address and is most commonly used for condominiums.

## 3. General Address Assignment Guidelines

For each address assignment, several variables must be considered. Questions like: "Which street is involved?", "What is the potential address range?", "What address numbers are already in use nearby?", and "What is the potential for future development of the adjacent area?" need to be answered before a new address can be issued. In many cases, the answers will be determined by the unique characteristics of the parcel, structure, and occupancy itself. However, there are also general address assignment guidelines which apply to almost every situation. These guidelines are presented below:

- An address must follow the correct format. See Section 2 for a description of the address components. Under this guideline, the following points apply:
  - All necessary address components must be included. For example, if the street name requires a directional, such as W Colonial Drive, it is considered an integral part of the address.
  - The legal street name must be used. Many streets are known by more than one name known as "aliases." Hamilton Cleves Rd, for instance, is also referred to as SR 128 (State Road 128). However, only the name which appears on the recorded subdivision plat or street name petition is considered the legal name.
- An address must conform to the local addressing grid. See Section 2 for a
  description of the City of Cincinnati and Hamilton County addressing grid. Under this
  guideline, the following points apply:
  - The local addressing grid must be identified and followed. There are seven addressing grids in use within the boundaries of City of Cincinnati and Hamilton County. In some locations, a grid may extend beyond the corporate limits of its parent municipality. Therefore, it is important to identify which grid covers the property in question.
  - The potential address range of the street must be identified. The potential address range determines which addresses may be assigned along a given street section. For example, an address number of "220" cannot be assigned off a street with a potential address range of 1000-1099.

- Addresses must be assigned in numerical sequence. The addresses along a street should increase consistently in one direction. Address numbers should not be assigned out of sequence. Number 789, for instance, should not fall between 735 and 741.
- Addresses across the street from one another should be similar. If 645 is in
  use on the odd-numbered side of a street, one should expect to find numbers
  close to 644 or 646 on the even side. In practice, some variation from this
  guideline is to be expected, but it should be followed as closely as possible.
- The odd/even relationship should be maintained along the entire length of a street. In some older areas of the county, the odd- and even-numbered addresses may switch sides when the street makes a sharp turn. Current procedures call for the odd/even relationship to remain constant along the full length of the street. EXCEPTION: When a street crosses from one addressing grid to another, a valid switch of the odd and even address may occur.
- Addresses must consider both current and future development. Under this guideline, the following points apply:
  - Existing addresses on or near the property must be reviewed. Existing
    addresses can help identify the potential address range along a given street.
    Even more importantly, the existing addresses must be reviewed to avoid
    duplicating a number when addressing a new parcel/structure/occupancy.
  - A sufficient interval should be left between address numbers to allow for future growth. In most residential areas, an interval of four addresses (310, 318, etc.) is an adequate minimum standard; six or eight numbers is even better. For commercial and industrial sites, the minimum interval should be at least six numbers to allow for future development.
  - Ineligible streets may not be used for addressing purposes. Ineligible streets include Interstates, ramps, or any unnamed street. In addition, any street which does not abut the property should not be used for address assignments (unless there is a legal access route running from the street to the parcel; see Addressing Landlocked Parcels, Page 31).

#### ADDRESSING REQUIREMENTS

While the City of Cincinnati Department of Transportation and Engineering (CDOTE or DOTE), the Hamilton County Planning Department, and CAGIS work closely together to maintain the county's addressing system, each agency approaches this responsibility from a slightly different perspective. The Hamilton County Planning Department focuses on fulfilling the requirements of the county's addressing ordinance for County Townships and various cities. CDOTE assigns, updates, and maintains the addresses for all properties within Cincinnati corporation limits. The CAGIS Consortium staff, in addition to supporting the addressing function of the City and

County staffs, is responsible for maintaining a series of land record databases accessible to users both within and outside of county government. These different perspectives are detailed below.

CDOTE is legally mandated as the addressing authority for the City of Cincinnati. The Hamilton County Planning Department is the legally mandated addressing authority for the unincorporated portions of the county and, through a special agreement, several other municipalities. In this role, addressing technicians issue structure and occupancy addresses in the following categories:

- Address issuances for new construction. A valid address is required for a builder to obtain a building permit. Depending on the builder's request, address issuances for new construction may be made for a single structure/occupancy, or multiple issuances may be recorded on a plat or site plan.
- Address issuances for existing structures/occupancies. Occasionally, the address for an
  existing structure/occupancy may not be on file or may come into question. If research
  fails to reveal the in-use address, a valid address would be issued to resolve the
  situation.
- Address issuances for temporary structures. Temporary structures such as sales and
  construction trailers normally require addresses for permitting and E-911 purposes.
  These addresses remain valid only as long as the temporary structure remains on the
  original property; they cannot be automatically transferred to a permanent structure
  built on the site.
- Address changes initiated by the Addressing Agencies. In order to resolve addressing discrepancies, ensure public safety, or make room for new addresses, it may be necessary to change one or more addresses or street names. However, because such changes place a burden on the property owner/resident, they are not made lightly.

On improved properties, one of the assigned structure/occupancy addresses can also be used as the land parcel address. However, vacant properties pose a special challenge. Vacant parcels normally are not assigned an address unless new construction is expected to occur on the site. Platted residential subdivisions fall into this category; each lot is given an address in anticipation that a home will eventually be built there. Such addresses are identified in the GIS as Parcel addresses.

Both the Addressing Authorities and CAGIS staff therefore have mutual interest to ensure that the city and county's addressing system is accurate, comprehensive, and up to date. As they issue the addresses, the addressing staff provides a vital service to the public. By encoding those addresses in their multi-user databases, staff supports the important work of other governmental agencies.

## 4. Addressing Examples for Common Street Layouts

The following examples illustrate how different street layouts can influence addressing. Figure 3 shows the addresses along two blocks of a typical linear street:

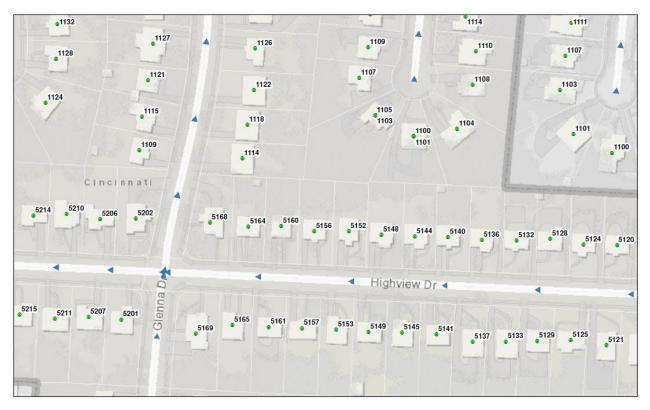


Figure 3: Addressing along a basic linear street

#### ADDRESSING ALONG A BASIC LINEAR STREET

This simple example illustrates several of the general addressing guidelines (see Page 8):

- Each block begins a new hundred-address range. In practice, the block ranges would be determined by the street's location and orientation in relations to the addressing grid. In this example, the potential address range along Highview Dr. conforms to the E-W grid.
- All in-use addresses conform to the potential address range along the street.
- All assigned numbers fit within the 5100-5199 range. This example also shows how only
  a portion of the potential address range is assigned. The address numbers 5112-5168
  and 5111-5169 comprise the actual address ranges for the block shown.
- All addresses have been assigned in numerical sequence. None of the numbers are out of the proper order.
- Each address number is similar to the one across the street. Address 5132 is across the street from 5133, 5164 is across from 5165, and so on. In practice, the numbers might not match so closely, but there should be no excessive range difference between one side and the other.

- The odd and even relationship is maintained along the length of the street. Odd numbers do not appear on the even side of the street and vice-versa.
- No duplicate addresses have been assigned. Each property has a distinct address number; there is no confusing duplication.
- There is a sufficient interval between addresses to allow the future growth. An interval has been left between each address and the next. Should there be a need to assign a new address between 5132 and 5136, for example, the numbers 5134 is available for use.

#### ADDRESSING ACROSS A "T" INTERSECTION WITHIN A BLOCK

Figure 4 shows how addresses are assigned when a "T" intersection occurs between the ends of a block. In this instance, there is no need to start a new hundred range at Alcliff Ln. The prevailing 5200 range simply continues across the intersection. Notice, however, that the cross-street addresses are kept consistent. All other general addressing guidelines apply; see Page 8 for more information.

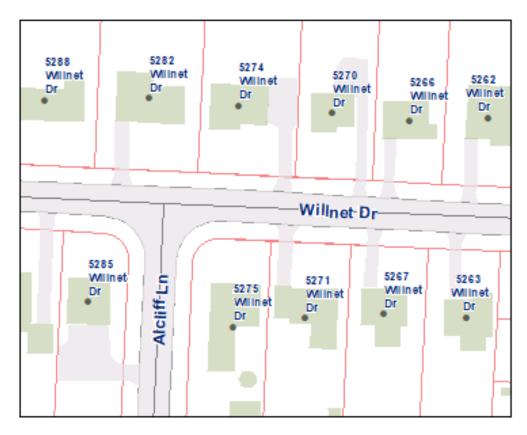


Figure 4: Addressing across a "T" intersection

#### ADDRESSING ALONG A STREET WITH A "DOG LEG" INTERSECTION

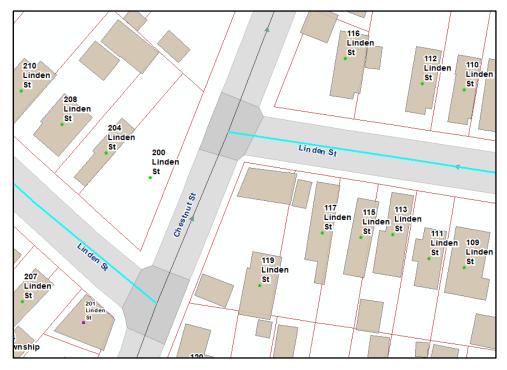


Figure 5 illustrates how some streets include offset or "dog leg" intersections. The offset arrangement of the intersections makes no difference for addressing purposes; Linden St is treated as if it were continuous. Like any other intersection, a dog leg intersection may occur at the start or middle of hundred block.

Figure 5: Addressing along a street with a "dog leg" intersection

#### ADDRESSING ALONG A NONCONTINUOUS STREET

Figure 6 illustrates how some streets terminate at one location and then begin again at another. Walnut St terminates at a dead-end, just north of 11578 Walnut St, and then begins again near 11588 Walnut St. The address numbers continue along the "gap", leaving enough house numbers available for possible future development.

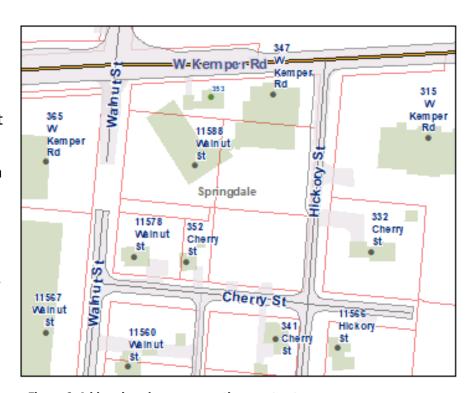


Figure 6: Addressing along a noncontinuous street

#### ADDRESSING ALONG A DIAGONAL STREET

Assigning addresses along a diagonal street involves a two-step process. First, the N-S or E-W orientation of the street must be determined. Second, the addresses are assigned according to the proper addressing grid. Figure 7 illustrates an example of diagonal streets.

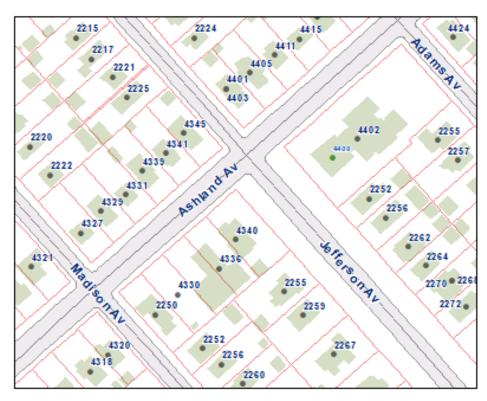


Figure 7: Addressing along a diagonal street. At first glance it may be difficult to determine which streets follow E/W or N/S.

#### **DETERMINING THE ORIENTATION OF A DIAGONAL STREET**

There are three primary methods for determining the orientation of a diagonal street:

- By examining its intersection with a major street. This is the preferred method to use whenever a minor street branches off a major street (based on the amount of vehicular traffic it carries).
- By examining its intersection with other existing streets. Often, it is difficult to label one street "major" and another "minor." In these cases, an existing street can be treated as "major" for any new streets which branch off from it. Whenever possible, streets which branch off of N-S roadways should use the E-W grid and vice-versa.

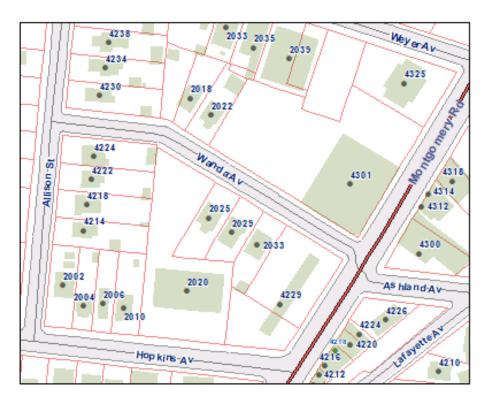
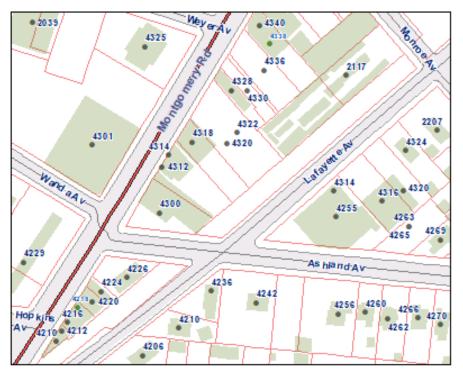


Figure 8: Example of a diagonal street

 By examining the preponderant length of the street. Sometimes, intersections cannot be used to determine street orientation. In Figure 9, Ashland Av appears to run E-W at the intersection with Montgomery Rd. However, when we look at the preponderant length of



Ashland Av, the orientation is north – south. This situation commonly occurs within large residential subdivisions where the streets are added in phases or have many curves.

Figure 9: At first glance Ashland Av appears to be an E/W street. Note the house numbering, however. A few blocks east and Ashland takes a hard left to the North.

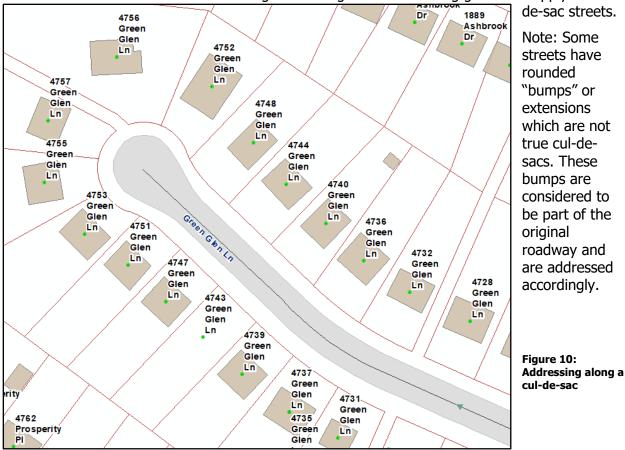
Under these conditions, the best determining factor for street orientation is the preponderant length of the street itself. Even if the roadway curves, it will usually follow a rough N-S or E-W course. From this alignment, the appropriate addressing grid can be selected.

Once the orientation of a diagonal street has been determined, addresses can be assigned according to the general addressing guidelines.

#### ADDRESSING CUL-DE-SAC STREETS

The term "Cul-de-sac" is a French expression meaning "Bottom of the bag." It is used to describe a short street which begins at an intersection and then runs to a dead end. In addition, cul-de-sac streets can often be identified by their "Court" street type. Figure 10 illustrates how addresses are assigned around cul-de-sac streets.

Essentially, the addressing procedures for cul-de-sac streets are the same as those for any other regular road- way. The only noticeable difference is that at the closed end of the street, an even and odd address will be abutting. All other general addressing guidelines apply to cul-



#### ADDRESSING STREETS THAT CHANGE DIRECTION

To avoid confusion about addressing grids when a street changes direction or curves, the City of Cincinnati Department of Transportation and Engineering and Hamilton County Planning Department follow a simple policy: Each street will retain its original addressing grid and range throughout its entire length no matter how times the roadway turns or bends. All other general addressing guideline apply.

Figure 11 illustrates how this policy works in practice. Instead of being confronted with repeated addressing grid and range shifts, a car driving along Lemarie Dr will pass steadily increasing address numbers. This arrangement is especially helpful for police and emergency vehicles looking to find a particular address as quickly as possible.

NOTE: In some of the older sections of the county and the municipalities, this consistent addressing policy for curving streets is not followed. Caution must be used when working with such streets to ensure that the correct addressing grid and range is followed for each section.

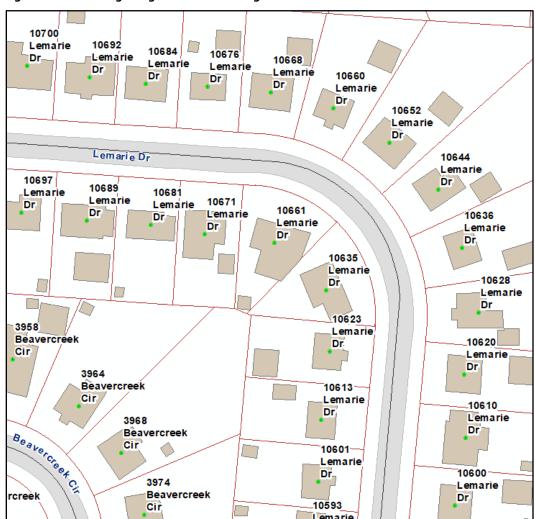


Figure 11: Addressing along a street that changes direction

#### ADDRESSING CIRCULAR STREETS

By definition, a "circle" street connects back to the same roadway it originates from. Figure 12 shows how addresses are assigned around a typical circular street. One of the two intersections must first be selected as the starting point for the addresses around the circle. This is done by noting the direction of increasing address numbers along the street of origin (in this case Sharondale Rd). The intersection closest to the origin of the addressing grid then becomes the starting point. In this example, the addresses are assumed to be increasing eastward along Beavercreek Cir.

Addresses are then assigned along the circular street in a continuous fashion as shown below. All other general addressing guidelines apply.



Figure 12: Addressing along a circular street

#### **ADDRESS NUMBERING AROUND A LAKE**

Two unusual addressing situations can arise when streets are designed to encircle a lake or similar round area. Figure 13 shows the first possible arrangement. A continuous roadway, Laurel Park Dr passes over the northern half of Ezzard Charles Dr. The even- numbered addresses along Laurel Park Dr are unaffected by the curve. However, the odd-numbered 1301-1499 range is omitted due to the structure. Note that Laurel Park Dr has no odd-numbered address range, again due to the presence of the lake.

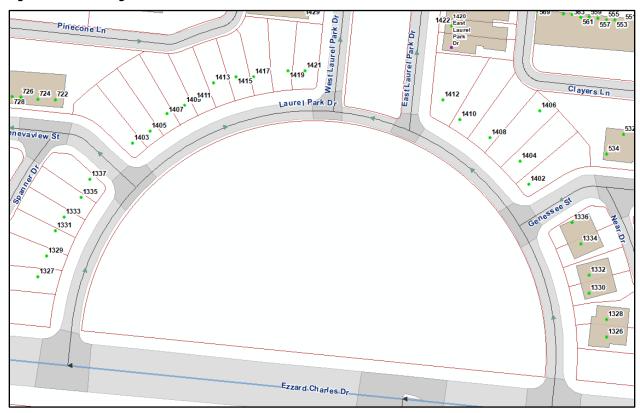


Figure 13: Addressing around a lake - Case #1

Figure 14 shows the second way a street may encircle a lake. In this instance, only one street, E Fountain Av, is involved. Instead of passing along one edge of the traffic island, E Fountain Av splits into two roadways which join again on the far side of the traffic island. When this arrangement is used, the address range along the street remains continuous. However, as the figure indicates, the odd-numbered addresses appear only along the northern portion of the street and the even addresses along the southern section. No potential address ranges exist along the inner edges.

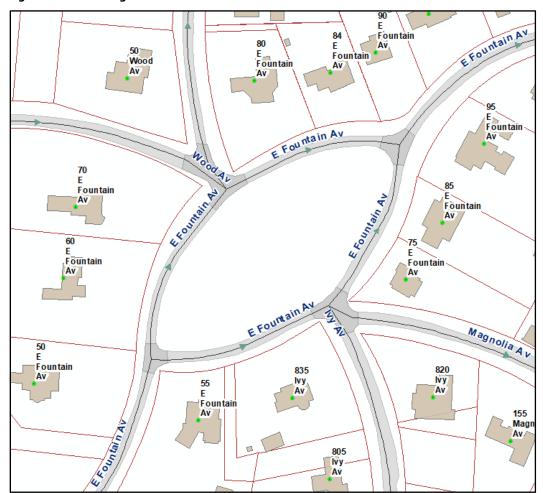


Figure 14: Addressing around a lake - Case #2

## **5. Addressing Examples for Common Parcel Layouts**

The following examples illustrate how different land parcel arrangements can influence addressing.

#### ADDRESSING VACANT PARCELS

As explained in the Addressing Requirements section, the City of Cincinnati Department of Transportation and Engineering and Hamilton County Regional Planning Department normally do not assign an address to a vacant land parcel unless new construction is expected in the near future. For example, addresses are assigned to the lots in approval of residential

subdivision, before the new homes are built, as in Figure 15. In cases where no new construction is planned, or the type of structure has not yet been determined, an addressing technician will usually wait to assign an address until a building permit is requested for the property.

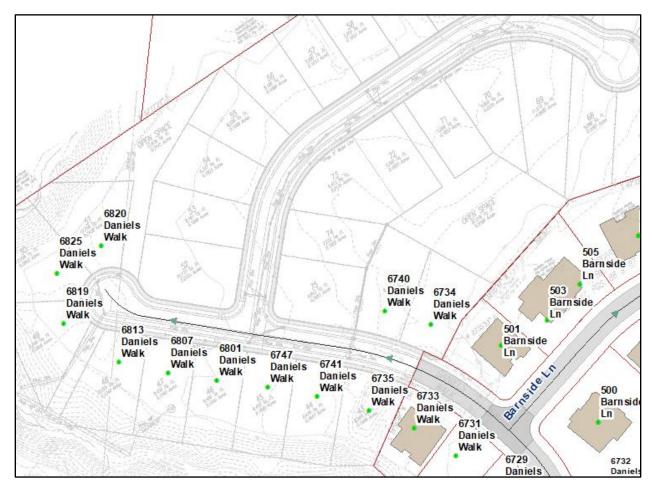


Figure 15: Addresses assigned for phase 3 of a development

Several special criteria apply to the addressing of vacant parcels:

- Vacant parcels which abut multiple right-of-ways should be addressed to the following order of precedence:
  - Major roads take precedence over minor roads. Whenever possible, vacant
    parcels should be addressed off a major road. Major roads are defined by one or
    more of the following characteristics:
    - They may be numbered state or county road.
    - They often have four or more traffic lanes.
    - They may be heavily traveled access routes (such as the main

thoroughfare of a residential subdivision.)

- If no major road abuts the parcel, a minor road is used.
- The narrowest edge of a parcel takes precedence over the wider edges. If there is no abutting major street to resolve the addressing question, the address of a vacant parcel should be assigned to its narrowest edge whenever possible. If two or more edges each qualify to be the "narrowest" edge, then the lowest possible address number is used.
- The lowest possible address number is used if none of the above criteria apply. In the case of a vacant parcel which is square and abuts more than one public road (none of these streets are considered a major road), then the lowest possible address number is assigned.
- If a large vacant parcel occupies an entire block it should normally be given an address in the middle of the hundred range. Sometimes, a very large parcel will occupy one more grid blocks. When this occurs, the parcel should be given a parcel address as close to the center of the range as possible. For example, a vacant parcel lying along the even side of the 300 block would address as 350 rather than 300 or 302. If the parcel runs the length of two blocks, for example between 700-900, it should be given an address near the center point (in this case, an address of 800.) NOTE: If the parcel abuts multiple right-of-ways, the guidelines listed above must first be followed to determine which street to use for addressing purposes.
- The assignment of a valid structure address supersedes the vacant parcel addressing guidelines. The GIS-assigned address on a vacant parcel is always superseded by any new structure address(es) issued by the Addressing Authority. However, these authorities are encouraged to check vacant parcels for previously assigned addresses, and to issue them as official assigned addresses whenever possible.

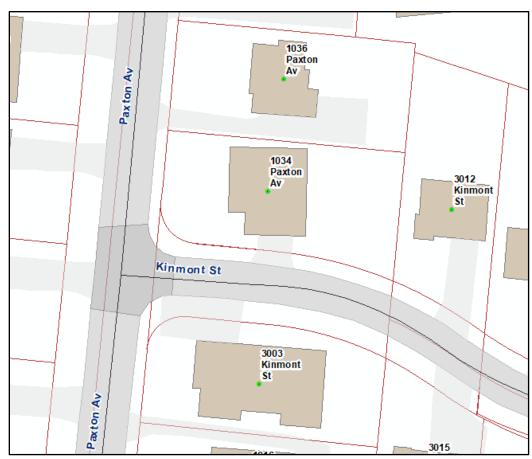
#### ADDRESSING CORNER PARCELS

A property which abuts the intersection of two different streets it is termed a corner parcel. Since there are two potential address ranges available for each corner parcel, it is very important to select the appropriate one before issuing an address. This selection process will follow one of two paths depending upon whether the parcel is vacant or improved with one or more structures.

**For Vacant Corner Parcels:** These parcels are addressed according to the guidelines listed under the Addressing Vacant Parcels in the previous section. In such cases, the selection of an address will be based on the presence of a major street, the layout of the parcel, or the lowest possible address number.

**For Improved Corner Parcels:** When one or more structures appear on a corner parcel, the addressing process becomes more complex. The general addressing guidelines apply. In addition, several questions need to be answered before an address can be issued for each structure:

- Is the structure a residential or a commercial/industrial building? As indicated below, each of these two categories is addressed in a different way. Residential buildings include single family residences, duplexes, and other multi-occupancy dwellings. Commercial/Industrial buildings include virtually all other types of business, recreational, and government structures.
- Which street does the structure face? The facing of a structure is determined by the location of its front or primary entrance. Structure facing is the key factor to consider when addressing residential buildings on corner parcels. Since the front door of the residential home in Figure 16 faces Paxton Av, the structure is given an address of 1034 Paxton Av rather than 1034 Kinmont St. For residential structures, the



issue of facing takes precedence over the issue of access. Even though the home in Figure 16 has it driveway (access route) off of Kinmont St, it actually faces (and is addressed off of) Paxton A۷.

Figure 16: Improved corner parcel

From which street is the structure accessed? The short section of roadway used to reach a structure from a public or private right-of-way is termed its access route. For many residential structures, the access route is a driveway leading directly to a garage or carport. The access route for commercial/industrial structures usually leads from the street to a parking lot close to the building. Since commercial/industrial structures can be very large and may face a different street than the one they are accessed from the access route is the key factor to consider when addressing commercial/industrial structures on corner parcels. Should a fire engine or other

emergency vehicle need to reach this building, the driver will want to know where the access route is located.

The different addressing methods for residential and commercial/industrial structures reflect two sets of priorities. Most people are used to seeing residential addressed posted near the front door of the structure, even if the access driveway leads to the side or rear of the building. Therefore, structure facing is the key factor for addressing residential buildings. Also, most residential structures are small enough to minimize any difference between its facing and access route.

For commercial / industrial structures, their large size and unique layouts emphasize the importance of the access route. Emergency vehicles may have a difficult time reaching the building if its address does not reflect the most direct access route.

#### ADDRESSING PARCELS THAT ABUT MULTIPLE RIGHT-OF-WAYS

A parcel which is bounded by three or more different streets is said to abut multiple right-ofways. The term is also applied to parcels that abut two different streets, but not their intersection. If the property did abut the intersection of the two streets, it would be considered a corner parcel. See above for more information about addressing corner parcels.

Parcels which abut multiple right-of-ways are handled very much like corner parcels, although there are usually more than two potential address ranges available for addressing. In any event, it is very important to select the appropriate range before issuing an address. This selection process will follow one of two paths depending upon whether the parcel is vacant or improved with one or more structures.

For Vacant Parcels Which Abut Multiple Right-of-Ways: These parcels are addressed according to the guidelines listed under the Addressing Vacant Parcels section. In such cases, the selection of an address will be based on the presence of a major street, the layout of the parcel, or the lowest possible address number. If none of the abutting streets are a major street, then the street with the narrowest frontage would be used. If all the frontage is the same on each abutting street, then the third criterion, the lowest possible address number would be used.

For Improved Parcels Which Abut Multiple Right-of-Ways: When one or more structures appear on a parcel which abuts multiple right-of-ways, the addressing process becomes more complex. The general addressing guidelines apply. In addition, several questions need to be answered before an address can be issued for each structure.

 Is the structure a residential or a commercial/industrial building? As indicated below, each of these categories is addressed in a different way. Residential buildings include single family residences, duplexes, and other multi-occupancy dwellings.
 Commercial/Industrial buildings include virtually all other types of business, recreational,

- and government structures.
- Which street does the structure face? The facing of a structure is determined by the location of its front or main entrance. Structure facing the key factor to consider when addressing residential buildings on parcels which abut multiple rightof- ways.
- From which street is the structure accessed? The short section of roadway used to reach a structure from a public or private right-of-way is termed its access route. For many residential structures, the access route is a driveway leading directly to a garage or carport. The access route for commercial/industrial structures usually leads from the street to a parking lot close to the building. Since commercial/industrial structures can be very large and may face a different street than the one they are accessed from, the access route is the key factor to consider when addressing commercial/industrial structures on corner parcels.

#### ADDRESSING NON-CONTIGUOUS PARCELS

Some parcels are made up of two or more sections separated from each other by roadways or other parcels. Such properties are termed non-contiguous parcels. This arrangement is usually made for the benefit of property owners who want a single tax bill for all the pieces of land they own in a particular area.

When addressing non-contiguous parcels, it is necessary to examine all of the sections included in the legal description of the property. Normally, each section will require an individual address (unless it is vacant and landlocked). However, the addressing process will follow one of two paths depending upon whether all sections of the non-contiguous parcel are vacant, or it any section has been improved with one or more structures:

**For Vacant Non-Contiguous Parcels:** Each section is evaluated and addressed separately using the guidelines listed under Addressing Vacant Parcels.

Once all of the individual sections have been addressed, it is necessary to select a parcel-level address from among the group. Unless one of the non-contiguous sections is addressed off of a major road, the parcel-level address will normally be the section address with the lowest number. If at least one major road is involved, the lowest section address number assigned off the major road(s) will be used as the parcel-level address.

**For Improved Non-Contiguous Parcels:** When one or more structures appear on a non-contiguous parcel, the addressing process becomes more complex. As with vacant non-contiguous parcels, each section will require an individual address (unless it is vacant and Landlocked). The main difference between vacant and improved non-contiguous parcels is that the presence of a structure always takes precedence over a vacant section. Whenever a structure is present on at least one section of the parcel, the addresses assigned to any other vacant sections are not eligible to become the parcel-level address.

When assigning an address to the improved section(s) of a non-contiguous parcel, each section should be thought of as a separate property. All of the general addressing guidelines apply. In addition, any other guidelines concerning parcel types (such as corner or landlocked parcels) or structure types (such as residential versus commercial structures) should be followed for each improved section of the parcel.

Once all improved sections of the non-contiguous parcel have been addressed, any remaining vacant sections can be assigned an address using the basic guidelines.

The final step is to assign the parcel-level address. As mentioned above, only the addresses of the improved section of a non-contiguous parcel are eligible to become the parcel-level address. Unless one of the improved non-contiguous sections is addressed off of a major road, the parcel-level address will normally be the improved section address with the lowest number. If at least one major road is involved, the lowest improved section address number assigned off the major road(s) will be used as the parcel-level address.

#### ADDRESSING LANDLOCKED PARCELS

By definition, a parcel is landlocked if it does not abut a public or private right-of-way. Due to this defining characteristic, landlocked parcels require a special set of addressing rules. As with many other types of parcels, these rules vary depending upon whether the landlocked parcel is vacant or has been improved with one or more structures.

For Vacant Landlocked **Parcels:** In Figure 17, 3606 Carpenters Green Ln is a vacant landlocked parcel; it has no direct access to Carpenters Green Ln or any other public or private street. In order to be assigned an address for a new home, the owner must first provide proof of an access easement.

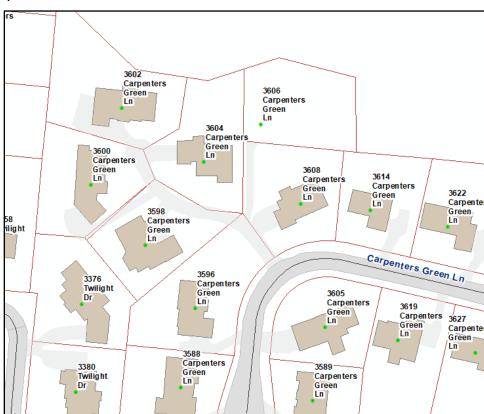


Figure 17: Addressing a landlock parcel

**For Improved Landlocked Parcels:** Landlocked status does not prevent property owners from ever building of structures on a landlocked parcel, but the property owner must first present evidence of a legal access route from a public or private street to the parcel (such as a deeded easement). An access easement is often attached to a deed but may be in a separate instrument. The burden of proof lies on the owner or developer in order to have an address assigned. Figure 17 illustrates several homes that are all accessed via an easement stemming from Carpenters Green Ln.

#### ADDRESSING PARCELS AFFECTED BY MUNICIPAL BOUNDARIES

As discussed in Section 2: Addressing Overview, the boundaries of the different municipalities within City of Cincinnati and Hamilton County and their associated addressing grids can have a very noticeable effect on the assignment of addresses. Figure 18 illustrates the situations that can occur whenever two municipal and addressing grid boundaries meet.

In Figure 18, the thick dashed line represents the municipal and addressing grid boundary between Loveland and Symmes Township" Notice how the boundary line affects addressing in this

area:

The address ranges change dramatically along Lebanon Rd. Within Symmes Township, the address range along Lebanon Road increased from south to north in the 11600 range. However, within the City of Loveland, Lebanon Road abruptly changes to the 100 range, north and south of West Loveland Av. If there had been no iurisdiction boundary line present (leaving Lebanon Road within Symmes Township), then a 11400-11500 address range would have been inserted between the 11300 and 11600 address ranges. Instead, the use of Loveland's 100-200 range creates a confusing situation for motorists and emergency vehicles traveling along Lebanon Road. In many instances, such abrupt changes are unavoidable.

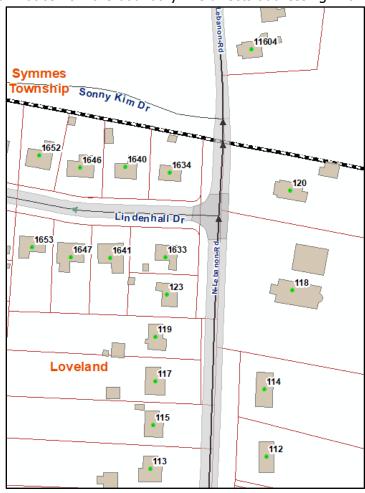


Figure 18: Addressing along a municipal boundary

City of Cincinnati and Hamilton County, however, often eliminates this type of problem by following a municipal addressing grid in areas where county and city parcels are intermingled. In the Figure 19 example, Loveland could provide a great service for the residents of Lebanon Road by adopting County's grid for the portion of the street within its jurisdiction. The "missing" range could then be restored between the 11300 and 11600 address ranges.

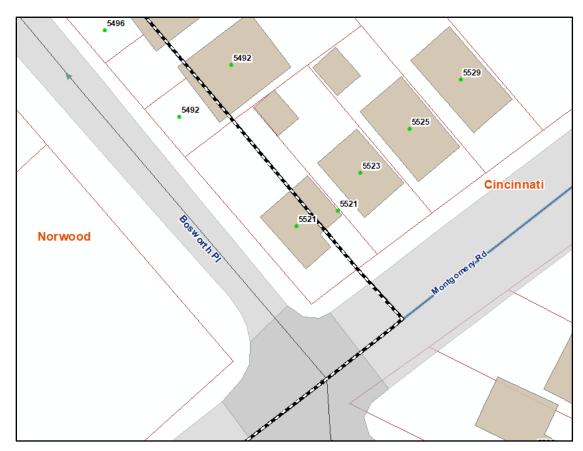


Figure 19: Parcel/structure split by municipal boundary

• In Figure 19, the structure at 5521 Montgomery Rd is split by the boundary line of Norwood and Cincinnati. Whenever a jurisdiction boundary (also known as a corporate limit) cuts across an existing parcel, that parcel must be split along the boundary line to create separate parcels within each municipality. Corporate limits are commonly drawn along existing parcel lines, but this is not always the case. In this case duplicate addresses are assigned to each parcel, one in each municipality. This appears to violate the guideline of assigning unique addresses. In fact, it demonstrates that there are situations when the addressing guidelines must be altered or suspended to account for real-world conditions.

This situation mostly occurs with the structure entirely in one municipality and a vacant parcel with the same owner in another municipality. Although it is a rare, occurrence there are a few instances of a single structure straddling a municipality line.

NOTE: Because address ranges can change so dramatically from one municipality to another, it is extremely important to correctly identify the local addressing grid before issuing any address!

#### HANDLING PARCELS USED AS ROADWAYS

Some parcels serve exclusively as roadbeds for the private streets within residential subdivisions, apartment complexes, and office parks. In addition, a roadway parcel may be used to provide a vehicular access route between a landlocked property and a nearby public or private right-of-way. Figure 20 below illustrates this second function. Both E Lakeshore Dr and E Lakeview Dr are privately owned roads that are aligned within single parcels.

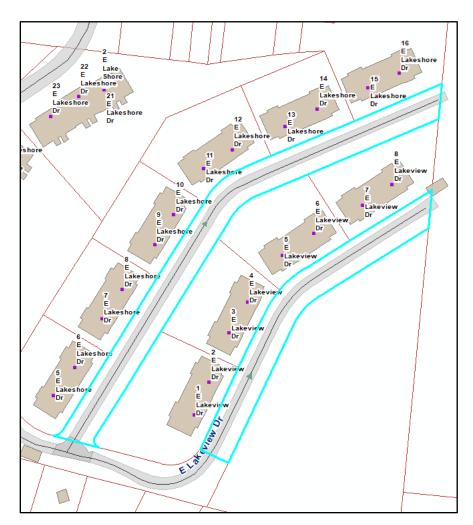


Figure 20: Roadway parcels

When parcels are used as roadways, they are normally not addressed by either the Regional Planning Department or by GIS. The Regional Planning Department views them simply as

vacant parcels which do not require an address. GIS recognizes that a parcel used exclusively as a roadway is unlikely to have a structure built upon it, so the usual parcel address is not assigned. If the roadway merely crosses the parcel or covers a small portion of it, then either a Regional Planning-or GIS-assigned address will be issued for the property according to the general addressing guidelines.

#### HANDLING PARCELS LOCATED WITHIN A RIGHT-OF-WAY

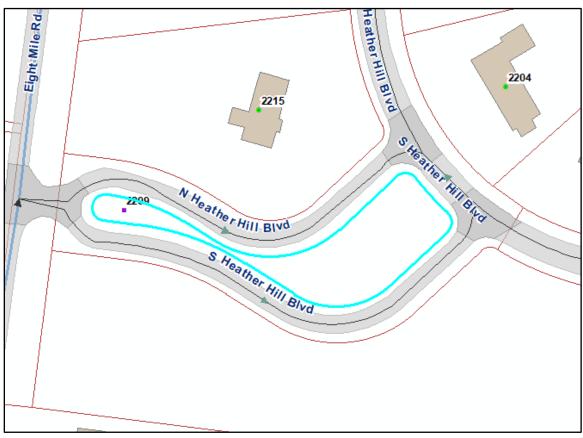


Figure 21: Parcels located within a right-of-way

As Figure 21 illustrates, many residential subdivisions, apartment complexes, and office parks have decorative landscape tracts located within the right-of-way of their main entrance streets. Some of these tract parcels also serves as sites for small guardhouses or information centers. Either way, additional addressing guidelines are required for this type of parcel since they are located within a right-of-way instead of abutting one side of it. These guidelines will vary depending upon whether the parcel is vacant or has been improved with one or more structures:

• For Vacant Parcels Located Within a Right-of-Way: As with most vacant parcels, the Addressing Authorities will not assign an address to a landscape tract unless there is

evidence that a structure will be built upon it (such as a site plan). Many of the tracts, however, are too small to build anything more than a narrow sign. In Figure 21, this guideline has been applied to the vacant landscape tract located within the right-of-way of Heather Hill Blvd. EXCEPTION: If a vacant parcel within a right-of-way is deemed large enough to support a gazebo or similar structure, GIS may go ahead and assign it an parcel address. This issuance would be made according to the procedure described below.

- For Improved Parcels Located Within a Right-of- Way: Whenever a parcel within a right-of-way needs to be addressed, the biggest question is whether to assign it an even-or an odd-numbered address. Technically, either one would work, but the following guideline is recommended for guardhouse/information center tracts near the main entrance of a development:
  - Since traffic moves along in the right-hand lane of the street, the tract should be given an address from the range on the left-hand side of the street (as a driver approaches the entrance from outside of the development). As shown in Figure 21, a visitor turning onto Heather Hill BLVD from Eight Mile Rd would see the guardhouse address number of 2209. The even-odd address relationship would therefore be preserved. Of course, this relationship would not hold true for vehicles leaving the development. Nonetheless, the arriving drivers will probably have a greater need to know the guardhouse address, so they are given priority for that reason. All other general addressing guidelines apply to parcels located within a right-of-way.

# **6. Addressing Examples for Common Structure and Occupancy Types**

The City of Cincinnati and Hamilton County addressing system is designed to provide accurate location information for the structures and occupancies within the county. A structure is generally defined as any permanent building used for the support or shelter of persons, animals, or property. An occupancy is a subdivided portion of a structure owned or leased by a tenant for a particular use. Occupancies may be used for residential apartments, commercial businesses, social clubs, etc. Buildings which can have more than one tenant (and therefore more than one occupancy) are termed multiple-occupancy structures.

Addresses are normally issued to structures and occupancies rather than the land they occupy. A vacant parcel may be assigned an address for reference purposes or in anticipation of a structure being built. However, since vacant parcel addresses are rarely posted in the field, they do not help the general public or emergency services. For that reason, structure and occupancy addresses are the primary focus of CDOTE, the Regional Planning Departments, CAGIS, and other county agencies. The following examples illustrate how different types of structures and occupancies can influence the addressing process.

#### ADDRESSING BASIC SINGLE-OCCUPANCY STRUCTURES

Single-occupancy structures, by definition, are those residential, commercial, and industrial buildings which have only one tenant. In the case of residential structures, like Single Family Homes (SFHs) and mobile homes, that tenant will normally be an individual family. For commercial and industrial structures, the tenant will usually be a business or organization. Whenever a building is subdivided to accommodate two or more tenants, it is then considered a multiple-occupancy structure.

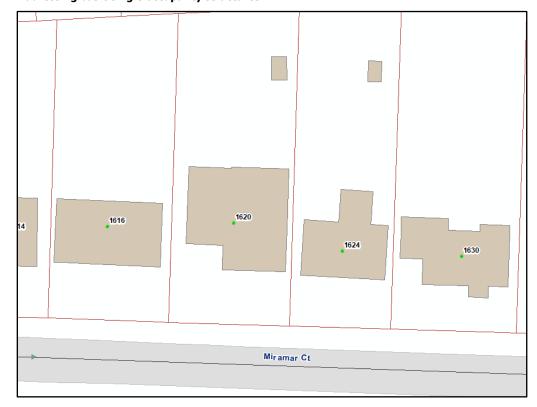


Figure 22: Addressing basic single occupancy structures

Assigning addresses to single-occupancy structures is a straightforward process. However, before an address can be issued, the following five key questions must be answered:

- How many structures are located on the parcel? This number will determine the total number of addresses which need to be assigned. It is important because the current county addressing ordinance requires that each existing or newly-built structure must have its own valid address.
- Does the parcel abut more than one street? If there is only one street available to
  address the structure(s), then the remaining three questions can be skipped. The
  issues of residential versus commercial/industrial structures, structure facing, and
  access routes are usually relevant only if there is two or more streets available for

addressing.

- Is each structure a residential or commercial/industrial building? The residential or commercial/industrial status of a single-occupancy must be determined if it is located on a corner or multiple right-of-way parcel. Residential structures should be addressed off of the street which the building faces (i.e. the side of the structure with the front door). Commercial/industrial structures should be addressed off the street from which the building is accessed.
- Which street does each structure face? As indicated above, the question is especially important for residential structures when there are two or more streets available for addressing. Sometimes, because of a structure's orientation on the parcel, it can be difficult to determine which street the building faces. When structure facing is unclear, a judgment call must be made to select which street to use for addressing. The best choice would be the street which offers the shortest vehicular access route to the structure.
- Which street provides access for each structure? As indicated above, access routes are used to address commercial/industrial structures, and other types of buildings whenever their facing is unclear.

Once these five questions have been answered, an address can be assigned to each structure according to the general addressing guidelines.

#### ADDRESSING BASIC MULTIPLE-OCCUPANCY STRUCTURES

Multiple-occupancy structures, by definition, are those residential, commercial, and industrial buildings which have been subdivided for use by more than one tenant. Examples of residential multiple-occupancy structures would include duplexes and apartment buildings. Commercial and industrial examples would include shopping malls, multi-story office buildings, and subdivided warehouse rented by different tenants.

For multiple-occupancy structures, CDOTE assigns individual address numbers for each space with a separate access point. For example, a residential duplex in which each unit has a front door that opens from the outside directly into the unit, two address numbers would be assigned. In Figure 23, this is illustrated. For a multiple-occupancy commercial building, like a shopping center, individual address numbers would be assigned to each commercial space. Each of those addresses would be assigned following the basic addressing guidelines. If the individual units/spaces front different streets (residential) or are accessed from different streets (commercial and industrial) then the individual addresses may be assigned off different streets, even if the units are part of one building.

If there are not enough unique house numbers available for each space in a multiple-occupancy structure, Unit letters may be assigned with duplicate house numbers. In some cases, even when there are enough house numbers available to assign individually, it may make more logistic sense to use Unit letters with duplicate house numbers.

In Figure 23, several structures off VanDyke Dr and Mowbary Ln are duplexes, buildings subdivided into two separate residential units (some structures of this type have a total of four units and are termed quadruplexes). Each of these buildings therefore requires multiple addresses; one for each unit. No odd numbered interval is left between the duplex occupancy addresses since it is very unlikely that the structure will ever be subdivided into a third or fourth occupancy. The normal four-, six-, or eight-number interval is still maintained between separate duplex structures.

The duplex at the southeast corner of the intersection is unusual in that its occupancies, 856 VanDyke Dr and 3303 Mowbary Ln. This arrangement shows how each occupancy must be handled separately for addressing purposes, even though they are part of the same structure.



Figure 23: Addressing basic multi-occupancy structures

#### ADDRESSING APARTMENT/CONDOMINIUM/TOWNHOUSE STRUCTURES

For residential, commercial, or industrial multiple-occupancy structures that have a single access point (front door) which then may enter a lobby with many interior units, CDOTE assigns a single address number. It is then up to the owner/developer/property manager to determine the secondary designators for the interior suites or apartments which is a necessary part of the address for the United State Postal Service, the tenant, etc. However, these individual tenant spaces are not documented in CAGIS.

However, condominiums are an exception to this practice. Since each condo unit is owned rather than rented, each condo unit has its own parcel number with the Hamilton County Auditor. Each condo parcel therefore is assigned its own address in CAGIS. This is done whether the condo building has individual access points (townhome condos, commercial storefront condos) or a single access point with interior units. Again, if not enough house numbers are available or if makes more logistic sense duplicate house numbers with unit/suite letters may be assigned.

If the condominium building does have multiple exterior access points, each access point should be addressed following basic address guidelines and may be addressed off different streets as discussed in the previous section.

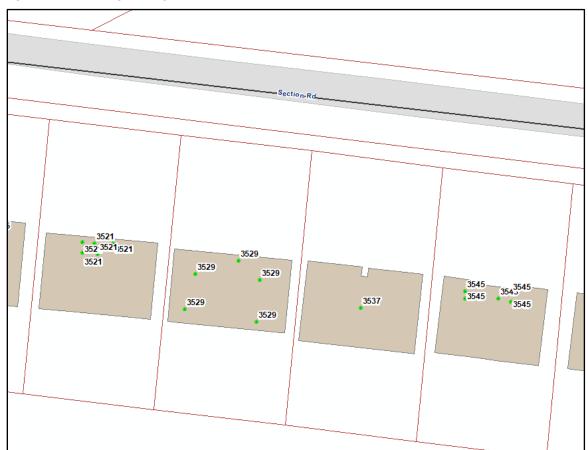


Figure 24: Addressing basic apartment structures

Consistency is always important assigning suite or apartment numbers. Only one addressing method, either grid-based addresses or a single address + suite numbers, should be used for each multiple-occupancy structure. In apartment/condominium/townhouse developments where there is more than one multiple-occupancy structure, the same addressing method should be used for all the buildings whenever possible. Like address numbers along a roadway, suite numbers should be assigned in a logical, orderly sequence. Finally, it is important to remember that once it is assigned, a suite or unit number becomes an essential component of an occupancy's street address.

One of the key elements to remember when assigning suite numbers to any multiple-occupancy structure is consistency. Like address numbers along a roadway, suite numbers should be issued in a logical, orderly sequence. Finally, it is important to remember that once it is assigned, a suite number becomes an essential component of an occupancy's street address.

#### ADDRESSING TEMPORARY STRUCTURES

By definition, temporary structures are small buildings or trailers erected on a property for a specific use during a limited time period. Once that use has come to an end, the temporary structure will be dismantled and removed from the property. Examples include construction trailers, sales trailers, some model homes, and even tents. Addresses are required for such structures because they usually have telephone service and therefore need to be linked into the county's E-911 emergency response system.

In general, the procedure for addressing temporary structures is the same for any other single-occupancy structure. However, an important difference is that this address, like the trailer, is also temporary. When the trailer is removed, the address will cease to be valid.

The building under construction on the site will require a separate address. Once it is removed, the temporary address number cannot be transferred nor used for another structure until it is officially re-assigned by the City of Cincinnati and Hamilton County Regional Planning Department.

## 7. Guidelines for Posting Street Signage

For the City of Cincinnati, please reference the city's Code of Ordinances Sec. 723-61. - Street Name Signs.

For Hamilton County, please reference the Ohio Manual of Uniform Traffic Control Devices, per ORC 4511.11 Local conformity to manual for uniform system of traffic control devices.

### 8. Guidelines for Posting Addresses

For the City of Cincinnati, please reference the city's Code of Ordinances Sec. 723-65. - Displaying House Numbers and Sec. 723-69. - Removing House Numbers.

For Hamilton County, contact the local government, fire department or post office in that order as it applies to your jurisdiction.

# **Appendix**

#### Links:

Cincinnati Area Geographic Information System

www.cagis.org

Cincinnati Department on Transportation & Engineering

Transportation Design 801 Plum St., Suite 450 Cincinnati, OH 45202 <u>DTEaddress@cincinnati-oh.gov</u> <u>www.cincinnati-oh.gov/dote</u>

#### Hamilton County Regional Planning

Todd B. Portune Center for County Government
138 East Court Street, Room 801
Cincinnati, OH 45202
Phone: (513) 946-4550
www.hamiltoncountyohio.gov/government/departments/planning\_and\_developm
ent/contact\_us

NOTE: The United State Postal Service has its own set of Postal Addressing Standards which can be accessed at <a href="https://pe.usps.com/cpim/ftp/pubs/Pub28/pub28.pdf">https://pe.usps.com/cpim/ftp/pubs/Pub28/pub28.pdf</a>